IN THE CLAIMS:

The following listing of claims will replace all prior versions, and listings, of the claims in the application:

1. (Currently amended) A method for determining movements of an articulated figure for use in computer-generated animation, the method comprising:

accessing a pose sequence *Q(t)*, wherein *Q(t)* comprises position values associated with segments of an articulated figure at sequential times of the pose sequence;

calculating an inverse-dynamics solution *F(t)*, wherein *F(t)* comprises calculated torque values for the segments during sequential forward-looking intervals Δt, such as would result in movements of the articulated figure corresponding to *Q(t)*;

accessing force data *G(t)*, wherein *G(t)* comprises external force values for simulating a response of the articulated figure; ~~and~~

simulating a dynamic response of the articulated figure in reaction to a sum of *F(t)* and G(t), thereby defining a simulated pose sequence *P(t)*; and

providing the simulated pose sequence *P(t)* to a computer for use in animating an articulated figure.

2. (Original) The method of Claim 1, further comprising setting Δt equal to a user-determinable value, prior to the calculating step.

3. (Original) The method of Claim 1, further comprising scaling *F(t)* by a scale factor *s*, whereby the simulating step defines *P(t)* by a simulated dynamic response of the articulated figure in reaction to a sum of *F(t)* scaled by *s* and G(t).

4. (Original) The method of Claim 3, further comprising receiving user input defining a value of *s*, prior to the scaling step.

5. (Original) The method of Claim 3, wherein the scaling step further comprises scaling F(t) by *s,* wherein *s* is less than one.

6. (Original) The method of Claim 3, wherein the scaling step further comprises scaling *F(t)* by *s,* wherein *s* is greater than one.

7. (Original) The method of Claim 3, wherein the scaling step further comprises scaling *F(t)* by *s,* wherein *s* comprises a time-dependent function.

8. (Original) The method of Claim 1, further comprising calculating *G(t)* using *P(t)* as input to determine collision events between the articulated figure and other simulated objects, whereby impulse values for *G(t)* are determined.

9. (Original) The method of Claim 1, wherein the calculating step and the simulating step are performed concurrently.

10. (Original) The method of Claim 1, wherein the simulating step is performed after the calculating step has completed by defining *F(t)* over an animation sequence.

11. (Original) A computer-readable media encoded with instructions for determining movements of an articulated figure for use in computer-generated animation, the instructions comprising:

accessing a pose sequence *Q(t)*, wherein *Q(t)* comprises position values associated with segments of an articulated figure at sequential times of the pose sequence;

calculating an inverse-dynamics solution *F(t)*, wherein *F(t)* comprises calculated torque values for the segments during sequential forward-looking intervals Δt, such as would result in movements of the articulated figure corresponding to Q(t);

accessing force data *G(t)*, wherein *G(t)* comprises external force values for simulating a response of the articulated figure; and

providing a sum of *F(t)* and *G(t)* suitable for input in simulating a dynamic response of the articulated figure using a forward-dynamics motion simulation to determine a simulated pose sequence *P(t)*.

12. (Original) The computer-readable media of Claim 1, wherein the instructions further comprise setting Δt equal to a user-determinable value, prior to the calculating step.

13. (Original) The computer-readable media of Claim 1, wherein the instructions further comprise scaling *F(t)* by a scale factor *s*, whereby the providing step provides a sum of *F(t)* scaled by *s* and *G(t)*.

14. (Original) The computer-readable media of Claim 13, wherein the instructions further comprise receiving user input defining a value of *s*, prior to the scaling step.

15. (Original) The computer-readable media of Claim 13, wherein the

instructions further comprise scaling *F(t)* by *s,* wherein *s* is less than one.

16. (Original) The computer-readable media of Claim 13, wherein the instructions further comprise scaling *F(t)* by *s,* wherein *s* is greater than one.

17. (Original) The computer-readable media of Claim 13, wherein the instructions further comprise scaling *F(t)* by *s,* wherein *s* comprises a time-dependent function.

18. (Currently amended) The computer-readable media of Claim 11, wherein the instructions further comprise calculating *G(t)* using *P(t)* as input to determine collision events between the articulated figure and other simulated objects, whereby impulse values for *G(t)* are determined.~~The computer-readable media of Claim 11, wherein the instructions further comprise performing the calculating step and the simulating step concurrently.~~

19. (Original) The computer-readable media of Claim 11, wherein the instructions further comprise performing the simulating step after the calculating step has completed by defining *F(t)* over an animation sequence.

20. (New) The computer-readable media of Claim 11, wherein the instructions further comprise performing the calculating step and the simulating step concurrently.